Original Contribution

Addressing Tobacco Use in Patients With Cancer: A Survey of American Society of Clinical Oncology Members

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Abstract

Purpose: Assessing tobacco use and providing cessation support is recommended by the American Society for Clinical Oncology (ASCO). The purpose of this study was to evaluate practice patterns and perceptions of tobacco use and barriers to providing cessation support for patients with cancer.

Methods: In 2012, an online survey was sent to 18,502 full ASCO members asking about their practice patterns regarding tobacco assessment, cessation support, perceptions of tobacco use, and barriers to providing cessation support for patients with cancer. Responses from 1,197 ASCO members are reported.

Results: At initial visit, most respondents routinely ask patients about tobacco use (90%), ask patients to quit (80%), and advise patients to stop using tobacco (84%). However, only 44% routinely discuss medication options with patients, and only 39% provide cessation support. Tobacco assessments decrease at follow-up assessments. Most respondents (87%) agree or strongly agree that smoking affects cancer outcomes, and 86% believe cessation should be a standard part of clinical cancer care. However, only 29% report adequate training in tobacco cessation interventions. Inability to get patients to quit (72%) and patient resistance to treatment (74%) are dominant barriers to cessation intervention, but only 8% describe cessation as a waste of time.

Conclusion: Among ASCO members who responded to an online survey about their practice patterns regarding tobacco, most believe that tobacco cessation is important and frequently assess tobacco at initial visit, but few provide cessation support. Interventions are needed to increase access to tobacco cessation support for patients with cancer.

Introduction

Tobacco use in patients with cancer is associated with increased treatment-related toxicity, increased risk of second primary cancers, decreased quality of life, and decreased survival among patients with both tobacco-related and non–tobacco-related cancers.[1-10] Tobacco cessation may improve outcomes in cancer patients,[11-15] and tobacco use assessment and cessation support are advocated by several national organizations including the American Society of Clinical Oncology (ASCO).[16] Recent guidelines have been developed by ASCO to help increase tobacco assessment and cessation,[17] but considerable work remains to provide tobacco cessation support for patients with cancer as part of standard clinical practice.[18-19] Tobacco assessment and cessation are also not addressed in cooperative group clinical trials supported by the National Institutes of Health.[20] In a recent large survey of thoracic oncology providers, 90% of respondents believed that tobacco cessation is an important part of cancer care, but most did not routinely provide cessation support.[21] The purpose of this study is to report patterns of tobacco use assessment and cessation support by ASCO members and to identify perceptions of tobacco use as well as barriers to implementing cessation support for patients with cancer.

Methods

Study Sample

An online questionnaire was developed to assess ASCO member practice patterns and perceptions regarding tobacco use among patients with cancer. The target audience included full ASCO members practicing privately or in academic medical centers or universities, as well as those identified as allied health professionals. The online survey included questions asking about respondent background characteristics (ie, educational degree, area of clinical practice, top three disease sites seen in clinical practice, primary work setting, percentage of time devoted to patient care, and years since completion of a "most senior degree") and questions to assess frequency of assessing tobacco use and providing tobacco cessation support at initial patient visit, frequency of assessing tobacco use at follow-up appointments, perceived barriers to providing tobacco cessation interventions for patients with cancer, and opinion/judgment statements on the relationship between tobacco and cancer. Participants were asked about prior and current tobacco use. The questionnaire and administration plan were reviewed by the Tobacco Control Subcommittee and the Cancer Prevention Committee of ASCO.

The online survey was distributed between July 26, 2012, and October 3, 2012. Respondents were encouraged to complete the survey with the offer of complimentary access to the ASCO University module "Engaging in Quality Improvement" for continuing medical education credit. Of 18,502 ASCO members invited to participate, 1,197 (6.5%) completed the survey for this analysis.

Data Analysis

Descriptive analyses are presented for responses to survey questions. Respondent smoking history questions were combined to form one variable to represent smoking status. Respondents who answered the question, "Do you now smoke cigarettes every day, some days, or not at all?" with "Every day" or "Some days" were considered current smokers. Respondents who answered that they had smoked at least 100 cigarettes in their life were categorized as ever smokers. Respondents who answered "Not at all" to the smoking status question and "No" to having smoked at least 100 cigarettes during their lifetime were considered never smokers.

Results

The characteristics of survey respondents are shown in Table 1. Most respondents (92%) had a doctoral degree, and medical oncology represented the primary specialty category (81%). Breast, lung, and gastrointestinal cancer were the most frequently treated disease sites, with 62%, 56%, and 53% of respondents reporting these as the top three disease sites, respectively. The other disease sites were seen by fewer than 27% of respondents. Most respondents (78%) reported that it had been more than 10 years since they achieved their terminal degree, and most (79%) reported spending at least half of their time seeing patients. Current tobacco use was reported by 3% of respondents, and 24% reported an ever smoking history (ie, smoking at least 100 cigarettes in their lifetime).

Tobacco use assessment and cessation support patterns at initial visit and follow-up are reported in Table 2. At the initial patient visit, 90% of respondents reported that they ask patients if they use tobacco always or most of the time, 80% ask patients if they will quit, and 82% advise patients to stop using tobacco. However, fewer respondents reported discussing medication options (44% always or most of the time) or actively treating patients for cessation (39% always or most of the time). Questioning about tobacco use at follow-up was less frequently reported.

Respondent opinions on tobacco use and barriers to facilitating tobacco cessation among patients with cancer are shown in Table 3. Most respondents (87%) agreed or strongly agreed that current smoking by patients with cancer affects outcomes and that tobacco cessation should be a standard part of clinical care (86%). Most (75%) thought that clinicians need more training in tobacco cessation, and only 29% claimed that they have had adequate training in cessation interventions. Respondents listed inability to get patients to quit (72%) and patient resistance to treatment (74%) as dominant barriers to providing tobacco cessation interventions for patients with cancer. Lack of training or experience (38%), lack of available resources (42%), and lack of time (45%) were less frequently reported as barriers to providing cessation. Only 8% of respondents reported that they consider tobacco cessation to be a waste of time.

Table 1. Respondent Characteristics (N = 1,197)

Characteristic	No.	%
Degree (n = 1,197)		
MD and/or PhD	1,097	91.6
Other	100	8.4
Primary area of clinical practice (n = 1,088)		
Medical oncology	876	80.6
Surgical oncology	98	9.0
Radiation oncology	98	9.0
Other	16	1.5
Three most frequent cancer disease sites seen (n = 1,139)		
Breast	704	61.8
Lung	642	56.4
Gastrointestinal	603	52.9
Lymphoma	306	26.9
Genitourinary	275	24.1
Head and neck	244	21.4
General	232	20.4
Gynecologic	217	19.1
Leukemia	181	15.9
Work setting (n = 1,157)		
University or academic	581	50.2
Hospital based non-academic	254	22.0
Stand alone	287	24.8
Other	35	3.0
Years since completion of terminal degree (n = 1,157)		
Still enrolled or < 1	6	0.5
1-5	105	9.1
6-10	140	12.1
11-20	321	27.7
≥ 20	585	50.6
Percentage of time devoted to patient care (n = 1,157)		
0	19	1.6
1-24	72	6.2
25-49	154	13.3
50-74	300	25.9
75-100	612	52.9
Tobacco use history (n = 1,123)		
Current smoker	35	3.1
Ever smoker	264	23.5
Never smoker	818	72.8
Other (don't know)	6	0.5

Discussion

Among ASCO members who responded to an online survey about their practice patterns regarding tobacco, most believe that tobacco use is important, ask about tobacco use at initial visit, and advise those who use tobacco to quit. However, fewer

Table 2. Frequency of Physician Interactions With Patients

Question	Always		Most of the Time		Some of the Time		Rarely		Never		N/A	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
During an initial visit (n = 1,101)												
Ask patients if they smoke or use tobacco products	882	80.1	104	9.4	39	3.5	13	1.2	22	2.0	41	3.7
Ask people who smoke or use tobacco if they will quit tobacco use	594	54.0	288	26.2	126	11.4	40	3.6	26	2.4	27	2.5
Advise people who smoke or use tobacco products to stop smoking	638	57.9	270	24.5	112	10.2	32	2.9	18	1.6	31	2.8
Discuss medication options such as nicotine replacement, bupropion, varenicline, etc.	191	17.3	297	27.0	331	30.1	195	17.7	68	6.2	19	1.7
Actively treat or refer patients for smoking/tobacco use cessation intervention	172	15.6	253	23.0	343	31.2	213	19.3	94	8.5	26	2.4
During follow-up appointments (n = 1,101)												
Ask patients about current smoking or tobacco use	416	37.8	354	32.2	216	19.6	63	5.7	25	2.3	27	2.5
Ask patients if they have quit smoking or stopped using tobacco	389	35.3	379	34.4	229	20.8	56	5.1	24	2.2	24	2.2
Ask patients if they have relapsed back into tobacco use	313	28.4	292	26.5	295	26.8	141	12.8	37	3.4	23	2.1
Reinforce the importance of stopping tobacco use	411	37.3	377	34.2	212	19.3	46	4.2	25	2.3	30	2.7

Table 3. Physician Respondent Perceptions of Tobacco Use and Barriers to Providing Tobacco Cessation Interventions in Patients With Cancer Who Currently Smoke or Use Tobacco

Question	Strongly Agree (%)		Agree (%)		No Opinion or Neutral (%)		Disagree (%)		Strongly Disagree (%)	
	No.	%	No.	%	No.	%	No.	%	No.	%
Perceptions of tobacco use in patients with cancer (n = 1,088)										
Current smoking or tobacco use impacts treatment outcomes in cancer patients	403	37.0	544	50.0	100	9.2	26	2.4	15	1.4
Tobacco cessation should be a standard part of cancer treatment interventions	426	39.2	507	46.6	100	9.2	32	2.9	23	2.1
I have had adequate training in tobacco cessation interventions	59	5.4	258	23.7	273	25.1	398	36.6	100	9.2
Clinicians need more training in tobacco assessment and cessation interventions	253	23.3	566	52.0	184	16.9	61	5.6	24	2.2
Barriers to tobacco cessation interventions (n = 1,101)										
Inability to get patients to quit tobacco use	242	22.0	552	50.1	147	13.4	121	11.0	39	3.5
Waste of time; cessation does not affect outcomes in cancer patients	26	2.4	67	6.1	131	11.9	440	40.0	437	39.7
Lack of time for counseling or to set up a referral	110	10.0	384	34.9	228	20.7	295	26.8	84	7.6
No or limited provider reimbursement	97	8.8	291	26.4	338	30.7	216	19.6	159	14.4
Patient resistance to cessation treatment	239	21.7	578	52.5	163	14.8	92	8.4	29	2.6
Lack of training or experience in tobacco cessation interventions	80	7.3	337	30.6	316	28.7	289	26.2	79	7.2
Lack of available resources or referrals for cessation interventions	108	9.8	359	32.6	234	21.3	296	26.9	104	9.5

report assessing tobacco at follow-up, and most report that they do not routinely provide cessation support. Respondents report inadequate training and patient resistance to tobacco cessation as dominant perceived barriers to providing cessation support, suggesting that oncologists are receptive to increased education and support for tobacco cessation. It is important to note that few respondents describe smoking cessation as a waste of time.

The response rate to the online survey (6.5%) precludes us from making generalizations about the entire ASCO membership. However, the 1,197 respondents from our survey closely resemble respondents to a recent survey of thoracic oncologists from the International Association for the Study of Lung Cancer (IASLC), in which the response rate was 40%.[21] Both our survey and the survey of IASLC members demonstrate high levels of interest for tobacco assessment and cessation, but both also demonstrate a failure to translate this interest into the routine provision of tobacco cessation support for patients with cancer. Both surveys also identify similar perceived barriers to providing cessation support for cancer patients. Relatively high rates of tobacco assessment, low level of cessation support, and similar barriers to implementation have also been noted by other smaller surveys of oncology providers.[18-19] In addition, observations from tobacco cessation trials in patients with cancer demonstrate that most physicians do not provide tobacco

cessation support.[22-23] Consequently, while the response rate was not sufficient to be generalizable, the findings appear to be robust in that they mirror the results found in other surveys of oncologists. Observations may well be interested in tobacco cessation and feel that cessation is an important part of cancer care, but most oncologists do not actively provide tobacco cessation support.

The response rate was expected to be higher because of the 40% response rate to the IASLC member survey noted above.[21] Several factors may have affected the response rate, such as choice of incentives or frequency of receiving surveys by ASCO members. The low response rate might also reflect a lack of concern for tobacco by ASCO members. Importantly, respondents may have a much higher interest in tobacco assessment and cessation compared with nonrespondents. Consequently, the reported results may be overly optimistic, and a more representative assessment of ASCO members might demonstrate lower levels of assessment and cessation support, as well as different barriers to implementation. Results of our survey likely reflect maximal interest in tobacco assessment and cessation support practice patterns. Consequently, the true practice patterns of oncologists may in fact be worse than reported by our data.

These results suggest that even if tobacco use assessment is common, cessation support is not well incorporated into cancer care. Efforts are ongoing to improve tobacco cessation efficacy in patients with cancer, including consideration of psychological or behavioral comorbidity, social environment, and disease-related variables.[24-30] These efforts may ultimately result in improved tobacco cessation outcomes, but they will not be realized if patients are not offered tobacco cessation support. Improved education and training may be needed, but improving access to dedicated cessation support is also necessary to improve overall tobacco cessation outcomes. Current practice methods of optional tobacco assessment and cessation do not appear to adequately address the need for tobacco cessation in patients with cancer. Meaningful-use initiatives may have the potential to increase the identification of tobacco use in patients and improve access to tobacco cessation support.[31] However, the potential benefits of meaningful use will not be fully realized unless clinicians develop regular habits to provide support to all patients with cancer at risk for continued tobacco use through either direct tobacco cessation support by the clinician or referral to structured support in a dedicated tobacco cessation program. The standard of care for all patients with cancer who use tobacco should include detailed tobacco use assessment and effective tobacco cessation support.

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